

Canyon Fuel Company, LLC  
Dugout Canyon Mine  
P.O. Box 1029  
Wellington, Utah 84542



March 28, 2006

Ms. Pamela Grubaugh-Littig  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

*Rec'd  
C/007/039*

RE: Refuse Pile Amendment – Subsoil Pile #2 Berm Calculations, Dugout Canyon Mine, Canyon Fuel Company, LLC, C/007/039, Carbon County, Utah

Dear Ms. Grubaugh-Littig:

Attached please find four copies of calculations requested by Peter Hess for the berm surrounding the #2 subsoil pile at the waste rock site. There is currently a berm surrounding the subsoil pile and alterations to the berm to meet the requirements of the attached calculation will be made upon the approval of this amendment. A copy of this submittal has been delivered to the Price field office.

Thank you for your assistance and if you have any questions, please call me at (435) 636-2869.

Sincerely yours,

Vicky S. Miller

cc: Dave Spillman  
Pete Hess

**RECEIVED**

**MAR 31 2006**

**DIV. OF OIL, GAS & MINING**

# APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ☒ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☐ Transfer ☐

Permittee: Canyon Fuel Company, LLC

Mine: Dugout Canyon Mine

Permit Number: C/007/039

Title: Refuse Pile Amendment - Subsoil Pile #2 Berm Calculations

Description, Include reason for application and timing required to implement:

**Instructions:** If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- ☐ Yes ☒ No 1. Change in the size of the Permit Area? Acres: \_\_\_\_\_ Disturbed Area: \_\_\_\_\_ ☐ increase ☐ decrease.
- ☐ Yes ☒ No 2. Is the application submitted as a result of a Division Order? DO# \_\_\_\_\_
- ☐ Yes ☒ No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- ☐ Yes ☒ No 4. Does the application include operations in hydrologic basins other than as currently approved?
- ☐ Yes ☒ No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- ☐ Yes ☒ No 6. Does the application require or include public notice publication?
- ☐ Yes ☒ No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- ☐ Yes ☒ No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- ☐ Yes ☒ No 9. Is the application submitted as a result of a Violation? NOV # \_\_\_\_\_
- ☐ Yes ☒ No 10. Is the application submitted as a result of other laws or regulations or policies?  
Explain: \_\_\_\_\_
- ☐ Yes ☒ No 11. Does the application affect the surface landowner or change the post mining land use?
- ☐ Yes ☒ No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- ☐ Yes ☒ No 13. Does the application require or include collection and reporting of any baseline information?
- ☐ Yes ☒ No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- ☐ Yes ☒ No 15. Does the application require or include soil removal, storage or placement?
- ☐ Yes ☒ No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- ☐ Yes ☒ No 17. Does the application require or include construction, modification, or removal of surface facilities?
- ☒ Yes ☐ No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- ☐ Yes ☒ No 19. Does the application require or include certified designs, maps or calculation?
- ☐ Yes ☒ No 20. Does the application require or include subsidence control or monitoring?
- ☐ Yes ☒ No 21. Have reclamation costs for bonding been provided?
- ☐ Yes ☒ No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- ☐ Yes ☒ No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein

David Spillman  
Print Name

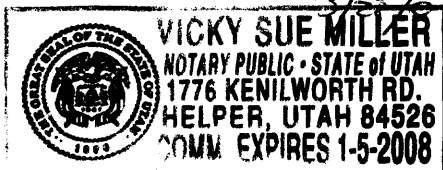
David Spillman, Engineering Manager  
Sign Name, Position, Date

Subscribed and sworn to before me this 28 day of MARCH, 2006

Vicky Sue Miller  
Notary Public

My commission Expires:

Attest: State of UTAH 1-5, 2008 } ss:  
County of CARBON



For Office Use Only:

Assigned Tracking  
Number:

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# APPLICATION FOR COAL PERMIT PROCESSING

## Detailed Schedule Of Changes to the Mining And Reclamation Plan

**Permittee:** Canyon Fuel Company, LLC

**Mine:** Dugout Canyon Mine

**Permit Number:** C/007/039

**Title:** Refuse Pile Amendment - Subsoil Pile #2 Berm Calculations

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

### DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED

[illegible]

**Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.**

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Dugout Canyon Mine

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**RA ATTACHMENT 7-3**

**TOPSOIL/SUBSOIL STOCKPILE SEDIMENT CONTROL**

Add to the back of existing information

Canyon Fuel Company, LLC  
Dugout Canyon Mine

Refuse Pile Amendment  
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**SUBSOIL STOCKPILE #2**

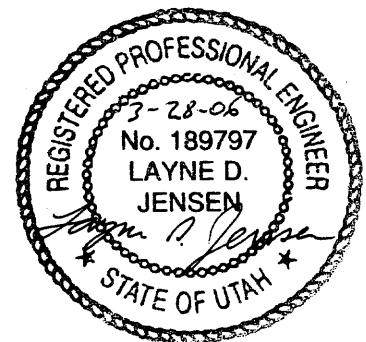
Soil removed from wide drainage ditch area surrounding refuse pile in 2005

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**RA ATTACHMENT 7-3**

**TOPSOIL/SUBSOIL STOCKPILE SEDIMENT CONTROL**



Sub-soil Stockpile  
Containment Calculations

Rainfall Depth = 1.95" (10-yr 24-hr storm)

The stockpiled soil is sub-soil and will be assumed to have no vegetation.

CN = 87 (Dirt road Hydrologic soil group C)

$$\text{Runoff Depth} = \frac{(P - 0.2S)^2}{P + 0.8(S)}$$

$$S = \frac{1000}{CN} - 10 = \frac{1000}{87} - 10 = 1.49$$

$$\text{Runoff Depth} = \frac{(1.95 - 0.2(1.49))^2}{1.95 + 0.8(1.49)} = \frac{2.73}{3.142} = 0.87 \text{ inches}$$

$$\text{Stockpile Area} = 18,543 \text{ ft}^2$$

$$\text{Runoff Volume} = (18,543 \text{ ft}^2) \frac{0.87''}{12 \text{ in/ft}} = 1,343 \text{ ft}^3$$

Containment Volume

A berm will be built around the entire stockpile. The berm at the lowest point should be 2.5' tall. As shown on the following page the berm can be shortened to 1.5' as the berm moves out from the lowest point. The areas used to generate a containment volume is shown on the following page.

$$\text{Ave Area (A-A)} = 15 \text{ ft}^2$$

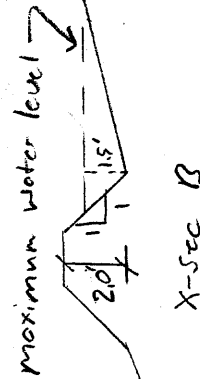
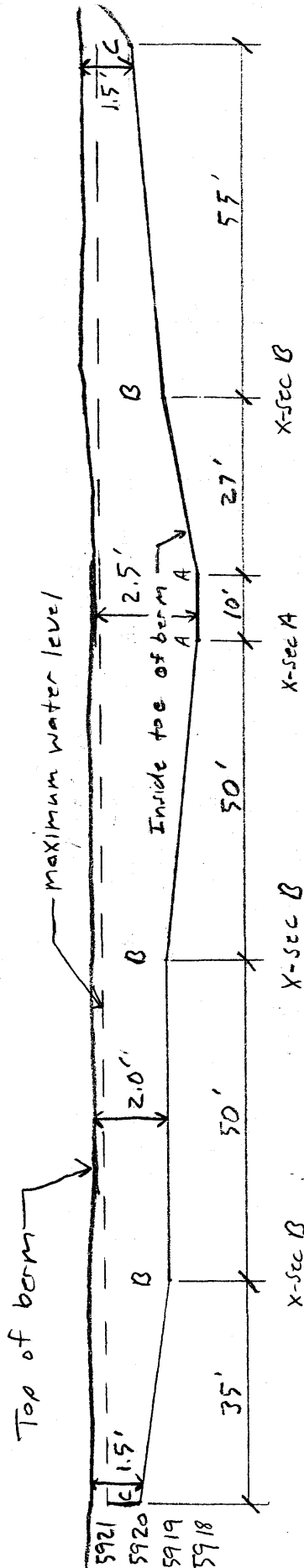
$$\text{Ave Area (A-B)} = (15 + 6)/2 = 10.5 \text{ ft}^2$$

$$\text{Ave Area (B-B)} = 6 \text{ ft}^2$$

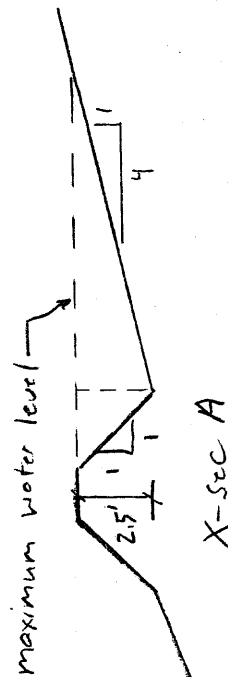
$$\text{Ave Area (B-C)} = (6 + 0)/2 = 3$$

$$\text{Vol.} = (15 \text{ ft}^2)(10') + (10.5 \text{ ft}^2)(50' + 27') + (50)(6) + (3)(35 + 55) = 1528.5 \text{ ft}^3$$

$$1528.5 > 1,343 \text{ ft}^3 \therefore \text{OK}$$



$$\text{Area} = \frac{1}{2}(15 \times 1.5) + \frac{1}{2}(6 \times 1.5) = 6 \text{ ft}^2$$



$$\text{Area} = \frac{1}{2}(2.5 \times 2.5) + \frac{1}{2}(10 \times 2.5) = 15 \text{ ft}^2$$